

## ABSTRACT OF THE DISCLOSURE

In a light source unit, a switchable filter section in which an RGB filter and a fluorescence observation filter can be shifted into the light path is disposed in front of a lamp. When fluorescence image mode is selected, excitation light in a part of the wavelength band of the blue wavelength band is supplied to an electronic endoscope, and the excitation light which is reflected by the subject is shielded by an excitation light shielding filter situated in front of a CCD, whereby a fluorescence image can be obtained. On the other hand, if normal-light image mode is selected, then R, G, B light is supplied sequentially, and even under illumination of B light, the color component image in the wavelength bands which are not shielded by the excitation light shielding filter are captured, thereby yielding a normal-light image also, and hence making it possible to capture both a fluorescence image and a normal-light image by means of a single image pickup element.